

Report to: Lead Member for Resources and Climate Change

Date of meeting: 12 December 2023

By: Director of Communities, Economy and Transport and Chief Operating Officer

Title: Corporate Carbon Offset Framework

Purpose: To seek approval for the County Council to adopt the Carbon Offset Framework and delegate authority to the Chief Operating Officer to implement the Framework.

RECOMMENDATIONS:

The Lead Member for Resources and Climate Change is recommended to:

- 1) Approve the Carbon Offset Framework set out in Appendix 1 of this report and agree that it shall be adopted by the Council;
 - 2) Agree the first stages of implementation, as set out in paragraph 2.11 of this report; and
 - 3) Delegate authority to the Chief Operating Officer to take all subsequent actions necessary to implement the Carbon Offset Framework.
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1 Background

1.1 In October 2019 the Council declared a climate emergency and in February 2023 approved an updated Climate Emergency Plan, covering 2023-25. The Plan includes a commitment to develop a framework that will guide the Council's investment in carbon offsetting and to review the framework as both best practice and markets evolve. The purpose of this report is to recommend the adoption of the carbon offset framework set out in Appendix 1 (the 'Framework') and the implementation steps set out in paragraph 2.11. The Framework has been developed with considerable input from a cross-party working group of the Place Scrutiny Committee.

2 Supporting Information

2.1 Offsetting is a way for an organisation or individual to offset their carbon emissions that are unavoidable by virtue of cost or technology by paying others to reduce their carbon emissions or deliver projects that absorb carbon emissions. Greenhouse gases, such as carbon dioxide, mix in the atmosphere, which means that emissions anywhere in the world have the same effect and, therefore, carbon offset projects have the same benefit wherever they occur. The key objective of carbon offsetting is to contribute to lowering global carbon emissions overall as quickly as possible. Offsetting does not replace the need to reduce emissions, and so organisations should only offset emissions that are hard to abate by virtue of technical or financial capability to mitigate them at source or that face barriers beyond their control, such as supply chain constraints.

2.2 In 2022 the Council commissioned modelling work to determine how it could meet its science-based target of cutting scope 1 and 2 carbon emissions in half every 5 years. The modelling indicated that, if no offsetting was considered, the Council would need approximately £200m up to 2050 to pay for capital intensive interventions to stay on target. Over 90% of this cost would be to decarbonise heat in buildings, notably by installing air source heat pumps. These usually require associated building fabric improvements to function correctly due to the age and condition of most Council buildings, as well as renewable energy and storage systems to achieve a small reduction in energy bills. Most of the £200m would be required over the next 15 years, at an estimated annual rate of about £14m, because it requires cuts to carbon emissions early on to keep within a science-based carbon budget. It will take a number of years to gradually replace boilers with heat pumps across the Council's buildings, because it does not

make either financial or carbon sense to remove oil or gas boilers that have not reached the end of their operational life. Consequently, carbon emissions from heating are hard to abate, by virtue of the timescale over which boilers can sensibly be replaced and by virtue of the cost to do so. Long-term funding for climate change is challenging, particularly with the growing pressures on local authority budgets and in the absence of clarity from central government on future funding to support public sector decarbonisation. Consequently, there is a need for the Council to use offsetting, in a measured and quality-controlled manner, to help contribute to bridging the gap between the pace and scale at which it can decarbonise heating and the need to keep within a science-based carbon budget.

2.3 There are three types of carbon offsetting, from the least effective to the most effective:

- 1) Emissions avoidance – these projects avoid carbon emissions that would otherwise be released into the atmosphere, for example investment in renewable energy to avoid the use of fossil fuel energy.
- 2) Emissions removal – these projects actively remove (sequester) carbon, for example through the planting of trees. A key consideration is how long the removal lasts for (e.g., with tree planting this will be decades).
- 3) Emissions capture – Similar to emissions removal, although not nature-based, for example carbon removal technologies with storage that could be for millennia. These technologies are mostly still in development.

2.4 There are two main types of carbon offset markets: a mandatory (or compliance) market, such as the UK's Emissions Trading Scheme, and voluntary programmes. The compliance market is where organisations purchase carbon credits to comply with legally binding emissions reduction obligations. This market aims to drive down emissions over time from energy intensive sectors. Voluntary Carbon Markets operate separately to mandatory markets and enable companies and individuals to purchase carbon offsets on a voluntary basis with no intended use for formal compliance purposes. Both markets are designed to facilitate the development and exchange of carbon offsets between buyers and sellers. Voluntary markets are international, in that buyers can purchase carbon offsets delivered in other countries. Currently, there is no government oversight of the international or national voluntary carbon markets. This creates potential financial, reputational and political risks, which are summarised in paragraph 2.5 below.

2.5 There are two main criticisms of offsetting, which create potential financial and reputational risks for buyers or investors:

- 1) Offsets may be considered as undermining an organisation's investment in cutting its own carbon emissions, as it is usually cheaper and simpler to pay to offset emissions than it is to invest in carbon reduction equipment and processes that drive down emissions.
- 2) Low prices and inaccurate claims mean that some offsets may not be meaningfully reducing emissions. For example, an independent investigative report in 2022 on Verra, which currently approves about three quarters of all voluntary offsets globally, claimed that over 90% of its rainforest offsets are 'worthless'.

2.6 Despite the criticisms above, all credible international, national and organisational scenarios to get to net zero include a degree of offsetting. For example, the UK's Environment Agency plan for net zero includes a target to offset 55% of its emissions and recent research of the UK's Financial Times Stock Exchange (FTSE) 350 companies indicates that the average offset rate is about 36% of scope 1 and 2 emissions. Many high-profile organisations have purchased, or have committed to purchasing, carbon offsets (e.g., Microsoft, Google, Unilever, Netflix, Ikea, Disney, Gucci, Shell, UNESCO, Waitrose etc). The two main ways to address the criticisms outlined above are to:

- 1) Limit the extent to which carbon offsets can be used to contribute to the Council's decarbonisation, in order to ensure that the majority of investment remains focused on measures that drive down emissions, such as low energy lighting and solar photovoltaic (PV).

- 2) Invest only in offsets that meet recognised and independently verified quality standards.

2.7 In the corporate Climate Emergency Plan, which was adopted by Full Council in February 2023, the Council committed to 'establish and implement a carbon offset framework and plan', and to only purchase high quality and verifiable offsets. The theoretical options available to the Council to take this forward, together with their main practical pros and cons, are summarised in table 1 below. The two main practical challenges currently are:

- 1) There are no high-quality carbon offsets available to buy today in the UK, due to demand significantly outstripping supply.
- 2) Purchasing cheaper and lower quality offsets from the international market presents relatively high reputational and financial risks.

No.	Options	Pros	Cons
1	Do nothing	Avoids costs that provide no return and potential reputational risks about greenwashing	Fail to meet the carbon reduction target
2	Purchase the cheapest available offsets	Helps to meet the carbon target now at least cost. Mostly emissions avoidance or removal schemes in developing countries.	Reputational risk from greenwashing and does not reduce county area or UK carbon footprint as there are no affordable local or UK offset schemes available
3	Purchase high-integrity UK-based offsets	Helps to meet the carbon target and minimises reputational and political risks	Higher cost of UK-based offsets and there are no high integrity carbon credits currently available for purchase from the UK market
4	Invest in informal carbon offsets on ESCC land	Helps to meet the carbon target in the longer term at low cost, retains the investment in the Council's value chain and may deliver co-benefits	The scale of opportunity on ESCC land is very limited due to a small land holding, offsets may not be formally accredited so lack credibility, lead-in times to carbon being offset can be about a decade and nature-based carbon offsets are short-lived (decades, not millennia)
5	Invest in developing formal carbon offsets in East Sussex on 3 rd party land	Helps to meet the carbon target in the longer term and can deliver co-benefits (e.g., local job creation)	Requires up-front investment and in-house capacity and expertise, and lead-in times to carbon being offset can be about a decade
6	Require offsets from suppliers and/or developers	Helps to fund corporate and area wide carbon offsets and deliver co-benefits (e.g., for fuel poverty, biodiversity, jobs)	Requires in-house capacity and possible expertise, and suppliers and developers would face some of the same challenges as the Council

Table 1. Offset Options for the Council.

2.8 The Framework is designed to guide Officer engagement in carbon offsetting. It was developed in 2023 with input from a cross-party working group of Members from the Place Scrutiny Committee, who support the Framework. The Framework seeks to achieve a balance between the following:

- 1) The need for offsetting to make a contribution to the Council reaching net zero.

- 2) Minimising the risk that offsetting undermines investment in carbon reduction, by limiting the amount that offsetting can contribute to decarbonisation to no more than 10% of the annual science-based reduction target. The estimated cost of this is shown in Appendix 2.
- 3) Only investing in offset schemes that meet recognised quality standards.
- 4) Only investing in offset schemes based in East Sussex, to ensure the benefits of the Council's spend are retained in the county.
- 5) The need to invest as soon as possible in order to unlock carbon offsets in the longer term.

This will enable the Council to use all means at its disposal today to get to net zero as quickly as possible, in line with the original climate emergency declaration.

2.9 If the proposed framework is approved by the Lead Member and adopted on behalf of the Council, there will then be the practical challenge of implementing it. To date, only a small number of local authorities appear to have engaged with the offset market, either as a buyer or investor (e.g., Hampshire County Council have purchased a small amount of carbon offsets). The Local Government Association has produced a case study of Devon County Council ('DCC'), which tried to purchase formally accredited carbon offsets from nature-based projects in the UK. DCC have been unsuccessful, as there is so little available in the market due to the length of time it takes to yield carbon offsets. DCC have therefore resolved to buy land and plant their own trees, as well as buying future carbon credits from third parties, which will only begin to deliver offsets from 2032 onwards.

2.10 In view of this challenging market, the recommendation is to take a flexible and gradual approach to implementing the framework. It is proposed to consider a portfolio approach to spread risk, increase the likelihood of obtaining offsets at an acceptable price and retain the ability to respond quickly to changes in this emerging market.

2.11 If approved and adopted, the following steps are recommended to begin the implementation of the Framework as a gradual and small-scale start to engaging with carbon offsetting:

- 1) Investigate whether there are carbon offset schemes in development in East Sussex that are planning to meet recognised high-quality standards and deliver local co-benefits and, if so, discuss terms and conditions with potential suppliers.
- 2) If available in the market, and subject to available funding, begin to invest from 2024/25 in offsetting up to 10% of the annual carbon reduction target, recognising that this may not deliver a measurable carbon reduction benefit for the Council for up to 10 years. Figure 3 and Table 4 in Appendix 2 illustrate that offsetting 10% of the annual carbon reduction target between now and 2050 could lead to the capture and storage of about 1,200 tonnes of carbon, at a cost of approximately £1.87m. This cost is based on an assumed £77 per tonne of carbon, which is the price currently being recommended by the consultancy firm Ernest & Young and including an inflationary increase of 3% per year.
- 3) Continue to work with partners to investigate opportunities to develop high quality nature-based carbon offset schemes on third party land in East Sussex (e.g., the South Downs National Park Authority).

These steps will enable lessons to be learned with limited financial and reputational risk and avoid being locked in early on to any particular pathway.

3 Conclusion and reasons for recommendations

3.1 Carbon offsetting has an essential part to play in the journey to net zero. The proposed Framework set out in Appendix 1 seeks to ensure that the Council, if and when it procures offsets, does so in a way that does not undermine its investment in carbon reduction measures, that meets existing recognised standards for high quality offsets and delivers local co-benefits.

3.2 The Lead Member for Resources and Climate Change is therefore recommended to approve the Framework, as set out in Appendix 1, and agree that it is adopted by the Council.

3.3 The Lead Member for Resources and Climate Change is also recommended to agree the implementation steps set out in paragraph 2.11 and to delegate authority to the Chief Operating Officer to take any other actions necessary to implement the Framework.

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LOCAL MEMBERS: ALL

BACKGROUND PAPERS: None